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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,323	01/14/2004	Kemal Guler	200309423-1	3497
22879	7590	09/24/2007	EXAMINER	
HEWLETT PACKARD COMPANY			MADAMBA, CLIFFORD B	
P O BOX 272400, 3404 E. HARMONY ROAD			ART UNIT	PAPER NUMBER
INTELLECTUAL PROPERTY ADMINISTRATION			3692	
FORT COLLINS, CO 80527-2400				

MAIL DATE	DELIVERY MODE
09/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/757,323	GULER ET AL.
	Examiner	Art Unit
	Clifford Madamba	3609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 January 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-22 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date Jan. 14, 2004.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

Detailed Action

1. This action is in reply to Application 10/757,323 filed on January 14, 2004.
2. Claims 1-22 are currently pending and have been examined.

Information Disclosure Statement

3. The Information Disclosure Statement filed on January 14, 2004 has been considered. An initialed copy of the Form 1449 is enclosed herewith.

Claim Rejections – 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-7 are rejected under U.S.C. 103(a) as being unpatentable over Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, in view of Hemiermann, U.S. 7,110,976.

6. As per claim 1, Dumas teaches the limitation of a *method of evaluating sequencing rules for a multiple lot auction, comprising:*

- *obtaining a next set of bids from a plurality of simulated bidders* [see at least page 100, column 1, paragraph 3; page 103, column 2, paragraph 3];
- *simulating the multiple lot auction using the next set of bids and a sequencing rule until simulated bidding on all lots is closed* [see at least page 100, column 1, paragraph 3; page 104, column 1, paragraphs 4-5];
- *simulating the multiple lot auction using a different sequencing rule until bidding on all lots is closed* [see at least page 100, column 2, paragraphs 4-5; page 104, column 2, paragraph 3];

Dumas doesn't explicitly teach the limitation comprising: *comparing results of the simulated auctions with both sequencing rules.* Hemeirman, however, discloses the process where comparative analysis is applied to outcomes of prior purchase experience in reverse auctions, in particular, with regard to cost of goods and services purchased [see at least column 36, lines 32-43].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Hemeirman, for the motivation of deriving cost-effective procurement strategies and a rule-based decision structure of reverse-auction purchasing tactics [see at least Hemeirman, column 36, lines 37-43].

7. As per claim 2, Dumas in view of Hemeirman teaches the limitation of claim 1 as described above. Dumas further teaches the limitation *wherein simulating the multiple lot auction with*

each sequencing rule comprises simulating a multiple lot auction [see at least page 99, column 1, paragraph 1].

Dumas doesn't explicitly teach the limitation wherein the multiple lot auction is a *reverse auction*. Hemeirman, however, discloses where an auction may be a reverse-auction-based system [see at least column 3, lines 56-65].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Hemeirman, for the motivation of analyzing situations wherein services and/or goods are procured from suppliers participating in a lowest-price bidding process [see at least Hemeirman, column 11, lines 26-33].

8. As per claim 3, Dumas in view of Hemeirman teaches the limitation of claim 1 as described above. Dumas further teaches the limitation *wherein simulating the multiple lot auction with each sequencing rule further comprises processing a bid from the next set of bids* [see at least page 105, column 1, paragraph 1 and 4].
9. As per claim 4, Dumas in view of Hemeirman teaches the limitation of claim 3 as described above. Dumas further teaches the limitation *wherein processing a bid from the next set of bids comprises at least one act selected from a group consisting of recording the bid, resetting a closing time, and permitting each simulated bidder to be informed of the bid being processed* [see at least page 105, column 1, paragraph 4].
10. As per claim 5, Dumas in view of Hemeirman teaches the limitation of claim 1 as described above. Dumas further teaches the limitation *wherein obtaining the next set of bids comprises determining, for each of a plurality of simulated bidders, whether the bidder is to submit a bid,*

when the bidder is to submit a bid, and an amount of the bid [see at least page 103, column 2, paragraph 5; page 105, column 1, paragraph 1].

11. As per claim 6, Dumas in view of Hemeirmann teaches the limitation of claim 5 as described above. Dumas further teaches the limitation *wherein, if a simulated bidder submits a bid, the bid is submitted according to a random time interval* [see at least page 103, column 2, paragraph 5; page 104, column 1, paragraph 3].
12. As per claim 7, Dumas in view of Hemeirmann teaches the limitation of claim 1 as described above. Dumas further teaches the limitation *wherein simulating the multiple lot auction comprises simulating auction time* [see at least page 104, column 1, paragraph 2].
13. Claim 8 is rejected under U.S.C. 103(a) as being unpatentable over Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, in view of Hemiermann, U.S. 7,110,976, and further in view of Jarvis, U.S. Pub 2004/0006503.
14. As per claim 8, Dumas in view of Hemeirmann teaches the limitation of claim 1 as described above. Dumas doesn't explicitly teach the limitation *wherein comparing results comprises, for each simulated auction, determining a metric selected from a group consisting of total procurement cost of all of the lots in the multiple lot auction, average procurement cost per lot, and mean procurement cost per lot*. Jarvis, however, discloses wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized [see at least paragraphs 11, 13 and 23].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught

by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices from suppliers [see at least Jarvis, Abstract, lines 4-9].

15. Claims 9-13, 15, 18-19 and 21 are rejected under U.S.C. 103(a) as being unpatentable over Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, in view of Jarvis, U.S. Pub 2004/0006503.
16. As per claim 9, Dumas teaches the limitation of *a storage medium containing code that can be executed by a processor and, when executed, causes the processor to:*
 - *select a first sequencing rule that dictates how multiple lots in a multiple lot auction are to be auctioned* [see at least page 100, column 1, paragraph 3; page 104, column 1, paragraphs 1 and 4-5];
 - *simulate a multiple lot auction using said first sequencing rule until bidding on all lots is closed* [see at least page 100, column 1, paragraph 3; page 104, column 1, paragraphs 1 and 4-5];
 - *evaluate results of the auction* [see at least page 103, table 1];
 - *select a second sequencing rule, simulate the multiple lot auction using said second sequencing rule until simulated bidding on all lots is closed, and evaluate results of the auction* [see at least page 100, column 2, paragraphs 4-5; page 104, column 1, paragraph 1, column 2, paragraph 3].

Dumas doesn't explicitly teach the limitation *determining a metric for each simulated auction*. Jarvis, however, discloses wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized [see at least paragraphs 11, 13 and 23].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices from suppliers [see at least Jarvis, Abstract, lines 4-9].

17. As per claim 10, Dumas in view of Jarvis teaches the limitation of claim 9 as described above. Dumas doesn't explicitly teach the limitation *wherein the metric comprises a metric selected from a group consisting of total cost of all of the lots in the multiple lot auction, average cost per lot, and mean cost per lot.* Jarvis, however, discloses wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized [see at least paragraphs 11, 13 and 23].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices from suppliers [see at least Jarvis, Abstract, lines 4-9].

18. As per claim 11, Dumas in view of Jarvis teaches the limitation of claim 9 as described above. Dumas doesn't explicitly teach the limitation *wherein the code further causes the processor to compare the metrics from the simulated auctions.* Jarvis, however, discloses wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized [see at least paragraphs 11, 13 and 23].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices from suppliers [see at least Jarvis, Abstract, lines 4-9].

19. As per claim 12, Dumas in view of Jarvis teaches the limitation of claim 9 as described above. Dumas doesn't explicitly teach the limitation *wherein the code further causes the processor to model behavior of a plurality of simulated bidders*. Jarvis, however, discloses wherein modeling behavior of a bidder is one of the objectives of the simulated experiment [see at least page 107, column 1, paragraph 1].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Jarvis, for the motivation of predicting the probability of being successful in an auction with a given bid [see at least Jarvis, page 107, column 1, paragraph 1].

20. As per claim 13, Dumas teaches the limitation of *a system comprising*:

- *an application that is executable by the processor; wherein, when executed, the application causes the processor to simulate a multiple lot auction using a plurality of sequencing rules* [see at least page 104, column 1, paragraph 1].

Dumas doesn't explicitly teach the limitation comprising *an application causing the processor to determine a metric associated with each simulated multiple lot auction, the metric usable to evaluate results of the simulated multiple lot auction*. Jarvis, however, discloses wherein supplier-specific cost measures consisting of total cost, average cost and mean cost are calculated and utilized [see at least paragraphs 11, 13 and 23].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Jarvis, for the motivation of establishing a cost model which can be used to obtain lower prices from suppliers [see at least Jarvis, Abstract, lines 4-9].

Dumas also doesn't explicitly teach the limitations of a system comprising *a processor and storage coupled to the processor and containing an application*. The Examiner, however, takes Official Notice in stating that the use of processors and storage devices containing software applications is well known in the art specifically with regard to computer devices used to conduct various processes (e.g. simulation experiments).

21. As per claim 15, Dumas in view of Jarvis teaches the limitation of claim 13 as described above. Dumas further teaches the limitation *wherein the processor determines, for each lot, an expected utility gain value for each of a plurality of simulated bidders* [see at least page 103, column 1, paragraph 3; column 2, paragraph 2].
22. As per claim 18, Dumas teaches the limitation of a system, comprising:
 - *means for simulating bids in a simulated multiple lot auction* [see at least page 104, column 1, paragraph 1];
 - *means for selecting a bid from the simulated bids for each of a plurality of lots in the multiple lot auction* [see at least page 104, column 1, paragraph 1];
 - *means for sequencing bidding on each of the plurality of lots in accordance with a first sequencing rule* [see at least page 104, column 1, paragraph 1].

Dumas doesn't explicitly teach the limitation comprising *means for determining a first metric associated with the simulated multiple lot auction*. The Examiner, however, takes Official Notice in pointing out that the means utilized in the simulation steps indicated above, in this case, a software application coded in a storage medium and executed by a processor, as disclosed by Dumas, can very well be performed by the computer system utilized in calculating a metric or cost measure, as disclosed by Jarvis [see at least paragraphs 11, 13 and 23].

23. As per claim 19, Dumas in view of Jarvis teaches the limitation of claim 18 as described above. Dumas further teaches the limitation comprising *means for simulating the multiple lot auction using a second sequencing rule* [see at least page 104, column 1, paragraph 1].

Dumas doesn't explicitly teach the limitation comprising *means for determining a second metric associated with the simulated multiple lot auction when using the second sequencing rule*. The Examiner, however, takes Official Notice in pointing out that the means utilized in the simulation steps indicated above, in this case, a software application coded in a storage medium and executed by a processor, as disclosed by Dumas, can very well be performed by the computer system utilized in calculating a metric or cost measure, as disclosed by Jarvis [see at least paragraphs 11, 13 and 23].

24. As per claim 21, Dumas in view of Jarvis teaches the limitation of claim 18 as described above. Dumas further teaches the limitation comprising *means for simulating time in the multiple lot auction* [see at least page 104, column 1, paragraph 1].

25. Claims 14 and 16-17 are rejected under U.S.C. 103(a) as being unpatentable over Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, in view of Jarvis, U.S. Pub 2004/0006503, and in further view of Cooper, U.S. 5,809,282.

26. As per claim 14, Dumas in view of Jarvis teaches the limitation of claim 13 as described above. Dumas further teaches the limitation comprising *incompatible lot auctions* [see at least page 99, column 2, paragraph 3].

Dumas doesn't explicitly teach the limitation *wherein the processor prevents a simulated bidder from winning two lots that are incompatible*. Cooper, however, discloses the use of IF-

THEN rules with specific regard to the setting of conditions or limits in the architecture of a system in a simulation process [see at least column 10, lines 36-47].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Cooper, for the motivation of meeting or accommodating user-preference requirements [see at least Cooper, column 11, lines 1-4].

27. As per claims 16-17, Dumas in view of Jarvis teaches the limitation of claim 15 as described above. Dumas doesn't explicitly teach the limitation *wherein the processor eliminates lots from bidding by a simulated bidder if the expected utility gain value for that lot and bidder is less than a threshold*; and, if the expected utility gain value for that lot and bidder is less than a maximum value. Cooper, however, discloses the use of IF-THEN rules with specific regard to the setting of conditions or limits in the architecture of a system in a simulation process [see at least column 10, lines 36-47].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Cooper, for the motivation of meeting or accommodating user-preference requirements [see at least Cooper, column 11, lines 1-4].

28. Claims 20 and 22 are rejected under U.S.C. 103(a) as being unpatentable over Dumas et al., A Probabilistic Approach to Automated Bidding in Alternative Auctions, International World Wide Web Conference, ACM Press, 2002, pp. 99-108, in view of Jarvis, U.S. Pub 2004/0006503, and further in view of Hemiermann, U.S. 7,110,976.

29. As per claim 20, Dumas in view of Jarvis teaches the limitation of claim 19 as described above. Dumas doesn't explicitly teach the limitation comprising *means for comparing the first and second metrics*. Hemeirman, however, discloses the process where comparative analysis is applied to outcomes of prior purchase experience in reverse auctions, in particular, with regard to cost of goods and services purchased [see at least column 36, lines 32-43].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Hemeirman, for the motivation of deriving cost-effective procurement strategies and a rule-based decision structure of reverse-auction purchasing tactics [see at least Hemeirman, column 36, lines 37-43].

30. As per claim 22, Dumas in view of Jarvis teaches the limitation of claim 18 as described above. Dumas doesn't explicitly teach the limitation *wherein the multiple lot auction comprises a reverse auction*. Hemeirman, however, discloses where an auction may be a reverse-auction-based system [see at least column 3, lines 56-65].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the limitation above, as taught by Dumas, with the method, as taught by Hemeirman, for the motivation of analyzing situations wherein services and/or goods are procured from suppliers participating in a lowest-price bidding process [see at least Hemeirman, column 11, lines 26-33].

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure:

- Kashima et al., U.S. 7,231,365, teaches an auction method and system as well as a storage medium.
- Collins, U.S. Pub 2003/0055662, teaches a system and method for auditing electronic auctions.
- Dietrich, U.S. Pub 2003/0018560, teaches auctions for multiple items with constraints specified by the bidders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford Madamba whose telephone number is 571-270-1239. The examiner can normally be reached on Mon-Thu 7:30-5:00 EST Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi, can be reached at 571-272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Clifford Madamba
Patent Examiner
September 10, 2007



Kambiz Abdi
Supervisory Primary Examiner
September 10, 2007